



# **COMMAND & CONTROL** **SYSTEMS SCHOOL**

## **MISSION**

Provide entry-level training for command and control systems officers and professional education at the career and advanced levels for selected Marine Corps total force and other Service officers in command and control, communication information systems, information management, and staff duties in order to qualify them for assignment to appropriate command and control and communication information systems billets in the Operating Forces and Joint Forces.

## **HISTORY**

The Command and Control Systems School provides career level and entry-level courses at Edson Hall, Quantico, Virginia. Formerly the Communication Officers School, it was established 1 June 1944 under Lieutenant Colonel C. Nelson. A twenty-week course, the Communication Officers Course was designed to standardize communications throughout the Marine Corps by teaching the newest techniques and equipment. The first class, which was the forerunner to the Advanced Communication Officers Course, graduated on 18 October 1944. In 1952, a Reserve Communication Officers Indoctrination Course was added to the school's mission in an effort to provide communication instruction to members of the Fleet Marine Corps Reserve. The Reserve course was expanded to two-week Phase I and Phase II courses to qualify reserve officers as communicators.

On 2 February 1954, ground was broken for a new building, which cost \$300,000. At Quantico, on 12 December 1955, the new building was officially dedicated and named Edson Hall in honor of Major General Merritt A. Edson, USMC: a World War II hero and leader of the famed Edson's Raiders. One reason for naming the school after Major General Edson was that he always emphasized communications in combat.



The first Communication Officers Orientation Course convened on 25 April 1955. The four-week course was designed to give the recent Basic School graduate a background in communications before transferring to the Fleet Marine Force (FMF). The basic course evolved into the Basic Communication Officers Course and the length varied from four to eighteen weeks through 1995. In 1996 the Marine Corps consolidated communications and data systems officer specialties into one Military Occupational Specialty (MOS) 0602. The title "Communication Officer" was changed to "Communication Information Systems Officer" and, in April 2000, changed again to "Command and Control Systems Officer." The current Communication Information Systems Officers Course (CISOC) has evolved into a twenty-three week course that provides initial skill training to company grade officers and enables the graduate to execute responsibilities of the Battalion/Squadron S-6 Officer. The course stresses hands-on equipment training combined with realistic field exercises.

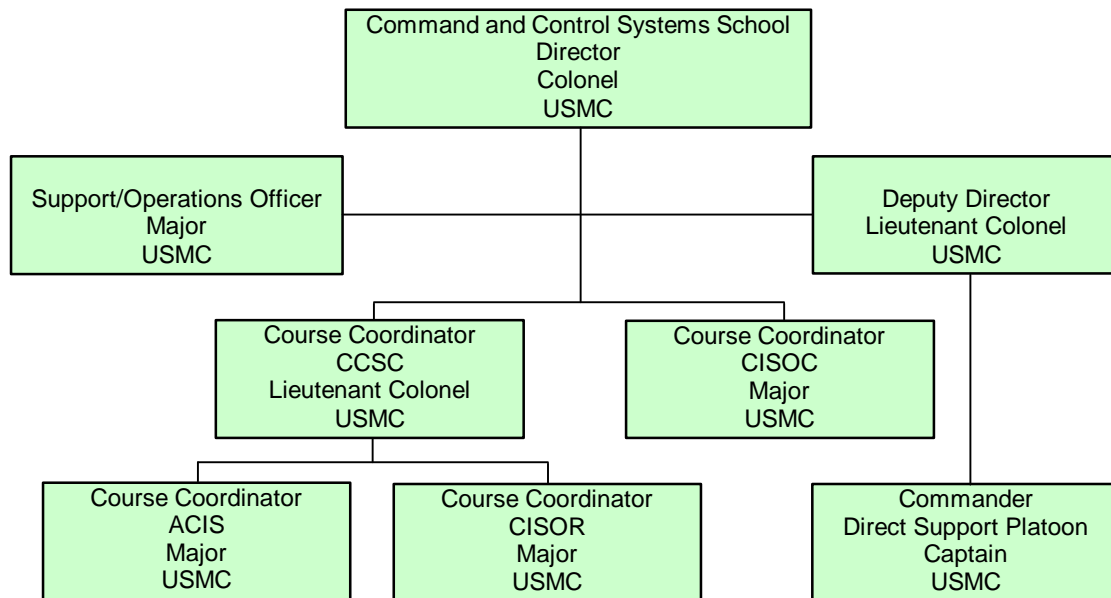
In 1973, the advanced course lengthened to forty-one weeks and additional emphasis was placed on amphibious command and control techniques. This course changed again in 1989 to the Command and Control Systems Course, to address advances in command and control systems currently used by commanders as they endeavor to control and direct forces. Today this course is forty-three weeks of career level Professional Military Education (PME) emphasizing command and control systems. Graduates are prepared to

fill billets on Marine Corps, joint or combined staffs. In recognition of the close relationship between communications and command and control systems, and of the career-level PME taught at Edson Hall, the school name changed to its present designation in 1995.

In 1997 the Phase I and Phase II Reserve Communication Officers Courses were replaced by two Total Force summer courses. The Advanced Communication Information Systems (ACIS) Course was designed for mid and senior level active and reserve field grade officers. The Communication Information Systems Officer Refresher (CISOR) Course was designed to support active and reserve company grade officers.

Command and Control Systems School continues to provide quality instruction at both the entry and career level to selected Marine Corps Officers and officers from other services and nations. Many graduates of this school have achieved success in a wide variety of endeavors. Included in the list of distinguished graduates are Senator John Warner and General Alfred M. Gray, former Commandant of the Marine Corps.

## **ORGANIZATION**



<b>Billet</b>	<b>Rank</b>	<b>DSN</b>	<b>Commercial</b>	<b>FAX</b>
Director	COL	278-2960	(703)784-2960	(703)784-2499
Deputy Director	LTCOL	278-2960	(703) 784-2960	
Operations Officer	MAJ	278-4809	(703) 784-4809	
CCSC Coordinator	LTCOL	278-3754	(703) 784-3754	(703) 784-5961
ACIS Coordinator	MAJ	278-2439	(703) 784-2439	
CISOR Coordinator	MAJ	278-4820	(703) 784-4820	
CISOC Coordinator	MAJ	278-4337	(703) 784-4337	
Platoon Commander	CAPT	278-5837	(703) 784-5837	(703) 784-2723

## **EDUCATIONAL PHILOSOPHY**

“Educating Information Warriors for the 21<sup>st</sup> Century”

Command and Control Systems School produces leaders at the company grade level who are technically proficient, mentally alert, and who have a vision of the future. We understand that for command and control to be effective we must provide command and control systems that are reliable and responsive to the needs of our combat leaders. We never lose sight of our overall mission—to build intellectually astute and tactically proficient officers who will win our nations battles.

## **EDUCATIONAL OBJECTIVES**

As a part of Marine Corps University, the Command and Control Systems School (CCSS) is acknowledged as a premier service school for training both entry level officers for basic command and control systems (C2S) and career level officers for professional military education (PME) and training as MAGTF command, control, communications and computer (C4) Planners. CCSS is a leader in military thought, innovation, and adaptability to changing requirements and technologies, but most of all the school focus is on warfighting.



Graduates of the entry level school are prepared to meet the challenges of the Operating Forces and Supporting Establishment at the tactical level, while graduates of the career level course are prepared to confront the information technology challenges within the Marine Corps and the Joint environment at the operational level.

Company grade officers are developed to be proficient and confident with all aspects of the MAGTF as a part of the total Marine Corps and Navy team. Field grade officers are provided skills and education to serve in senior MAGTF G-6 assignments and on Joint and Combined high level staff billets. CCSS is one of the precious gems of the Marine Corps, touching all aspects of warfighting across the Joint environment and providing training and education to other U.S. service and international officers.

## **STUDENT BODY**

The Student Body at CCSS consists of Marine Officers, other Service officers, and international officers from the rank of second lieutenant to senior field grade. Each of the four courses has a unique student body.

CISOC students are normally Marine Corps second lieutenants recently graduated from The Basic School with some company-grade students who made lateral moves from other MOSs. Students arrive at the course with the basic 0601 MOS and qualify for the MOS 0602, Command and Control Systems Officer, after successful graduation and six months of experience. International students also attend CISOC.

CCSC students are O-3 level officers from all U.S. services and virtually all MOSs. Army and Air Force students are typically from command, control, communication, computer, or intelligence-related specialties. International students are an important part of the CCSC student body. Marine Corps graduates of CCSC receive the additional MOS 9985, MAGTF Systems Planner.

ACIS Course students are typically Marine Corps field-grade officers from both the active and reserve components. These officers are in MOS 0602 or hold MOS 0602 billets.

CISOR Course students are company-grade or junior field-grade Marine Corps or other Service officers in MOS 0602 or a related field. They come from both the active and reserve components and are often returning to a MOS 0602 Operating Forces billet following duty in a “B” billet or in the Supporting Establishment.

## **CURRICULUM**

### **Command and Control Systems Course (CCSC) Curriculum**

With tremendous foresight and vision, General A. M. Gray, former Marine Corps Commandant, directed development of a course to expand knowledge of command and control systems throughout the Marine Corps. In 1989, the Command and Control Systems Course was created to meet this need. Since 1989, the course continues to modernize to maintain currency in a rapidly changing military environment.

The Command and Control Systems Course is a career-level Professional Military Education course conducted at Marine Corps University in Quantico, VA, for 43 weeks each year. Approximately sixty students from multiple military specialties and all services annually attend CCSC. Included within the diverse student population are ground combat arms officers, aviators, communicators, logisticians, and intelligence officers. These officers represent the Marine Corps’ best hope for leaders, from all battlespace functional areas, to guide our Corps into a future largely dominated by information technology. Such officers must understand much more than their military specialty—they must truly understand





the operations and information interaction, anticipate commanders' information needs across a greatly increased battlespace, appreciate information flow dynamics, and possess more than superficial knowledge of command and control systems and information paths. These goals dictate a broad, comprehensive program of instruction.

Students participate in five major subcourses throughout a ten-month curriculum. The curriculum advances in a building block approach, with the first subcourse forming a conceptual foundation. The academic year commences with **Command and Control Philosophy**, which examines decision-making, command relationships, information prioritization, and technological impacts on military operations. This subcourse emphasizes military commanders' needs for up-to-date situational awareness, operational demands for a common battlespace picture, and benefits of recognition decision-making for high-tempo operations. This subcourse provides the framework for remaining core curricula.

Working from this conceptual foundation, students synthesize new information and apply it throughout the spectrum of military operations. In the **MAGTF Operations Subcourse**, students examine operations/information interactions for each MAGTF element, and for an entire MEF. A two-day, scenario-based marked requirement tests students' ability to apply class material. Students make organizational, operational, and informational decisions, then define information flow paths to support this plan, and subsequently construct a technical architecture to support those information flow paths. The third subcourse, **Naval Operations**, introduces Navy warfighting philosophy and tactics, and shows how they contribute to the Navy/Marine team concept of expeditionary warfare. Students learn unique characteristics of naval forces, ship capabilities, and Naval command and control applications. Students will then apply the knowledge gained in another scenario-based requirement that emphasizes amphibious operations during operations other than war. The fourth subcourse, **Joint Task Force Operations**, introduces students to unique demands found with joint operations. In this subcourse, students study joint task force command relationships, joint command and control systems, information flow paths, and intelligence information (up to the TS/SCI level) available for military operations. The final subcourses, **C4I Planning** and **Information Management**, introduce students to the technical application of information systems. Students become familiar with both communication and data systems resident in modern battlespaces, as well as innovations looming on the technological horizon. Additionally, students design communication and data architectures to support information flow throughout the battlespace. After completing this entire academic curriculum, students are well equipped to assist future commanders in grappling with information age warfare challenges.



Beyond the core curriculum, students also participate in leadership, historical battle study, C2 application, and professional development programs. An effective communication program is designed to improve both writing and speaking skills. These adjunct programs seek to improve overall professional growth and assist students in becoming more versatile officers. Additionally, a one-month interlude occurs during the academic year and provides students with a tailored occupational field enhancement curriculum. During this evolution students divide into military specialty groups and receive advanced, specialized instruction. As many career-level PME students are returning to the Operating Forces from “B” billets, this extra curriculum ensures students also refreshed on specific military specialty knowledge before leaving the school. In several career fields this curriculum affords hands-on experience with automated planning and execution systems that students may encounter in the Operating Forces. Such exposure further improves officers’ ability to adjust to an information intensive operating environment.

A Command and Control Chair (C2 Chair) highlights a professional staff of instructors and numerous distinguished speakers. These lecturers represent key departments of the uniformed services, other schools and universities, and many governmental agencies. Students gain much deeper insights from these speakers, who grapple daily with many complex issues confronting our Country and the military. Such diversity and complexity within the instructor pool challenge the students’ intellectual development, as they must sort through conflicting views to discern the essential elements of any issue and formulate personal opinions.

Throughout its program of instruction, the Command and Control Systems Course emphasizes the importance of information for contemporary military operations and the great need for military officers conversant with both command and control systems and their supporting information flow technologies. To successfully meet demands of the 21<sup>st</sup> Century, military officers must capably manage what some have dubbed “Third Wave War.” Educating such Information Warriors is the first order of business at the Command and Control Systems Course. The course produces officers conversant in command and control and associated technologies, who also possess a thorough understanding of information/operations interactions. Most importantly, graduates return to their respective services prepared for the type of warfare that the information age portends—they return as Information Warriors.

## **C2 Philosophy Subcourse**

Command and Control Philosophy serves as the foundational subcourse for the Command and Control Systems Course. Positioned as the introductory subcourse, Command and Control Philosophy establishes the conceptual foundation for the remainder of the year. Subsequent subcourses rely on this foundation when exploring command and control systems within Marine Air-Ground Task Force (MAGTF) and Joint Task Force (JTF) operational environments.

The Command and Control Philosophy Subcourse contains three basic instructional sections: Military Organizations, National Framework, and C2 Concepts. The goal of the Military Organizations section is to introduce students to military components who represent key players in command and control. Students must understand organizational hierarchies to appreciate difficulties inherent in command and control of an individual service, as well as joint task force organizations. The National Framework section endeavors to present a broad view of issues impacting military operations. Briefs about the National Security/Military Strategies, Civil/Military Relationships, and Principles of War provide another context in which to assess military operations. Finally, the heart of the subcourse occurs in the C2 Concepts section. This portion of the subcourse seeks to provide multiple views of command and control related issues to expose students to the wide spectrum of thought in this area. A variety of speakers address decision-making techniques, decision types, decision-making models, technological influences on command and control, and command and control warfare as a subset of information warfare. All three sections combine to introduce students to military operations and command and control issues.

The Command and Control Philosophy Subcourse culminates with a Marine Corps C2 Symposium as the final event of the year. During this symposium, high-level speakers from throughout DoD and industry present thoughts on selected issues related to command and control and decision-making. Several student research papers are also chosen for presentation at the symposium. This symposium closes the Command and Control Systems Course by returning to the conceptual foundation of C2 Philosophy.

## **Marine Air-Ground Task Force (MAGTF) Operations Subcourse**

MAGTF Operations is both a core and a foundation course within the CCSC curriculum. As a core course, MAGTF Operations introduces battlespace activities and command and control systems of the MAGTF, and strives to develop each student's ability to serve as a MAGTF Command and Control Systems Planner, or as another service's planner working with the MAGTF. As a foundation course, MAGTF

Operations presents the MAGTF as a Joint Task Force model, with elements from ground, aviation, and combat service support forces. Students apply numerous Command and Control Philosophy Subcourse concepts (particularly types of decisions and the elements of Command & Control Warfare), within the MAGTF Operations Subcourse. These, along with MAGTF operational concepts, will carry forward into all subsequent CCSC subcourses.





## **Naval Operations Subcourse**

Naval Operations introduces the student to several essential elements of command and control upon which the follow-on JTF Operations Subcourse builds. Naval Operations moves the Marine Air Ground Task Force (MAGTF) to sea and embodies all the concepts of “Forward...From the Sea.” The student is introduced to the Amphibious Task Force (ATF)/Amphibious Ready Group (ARG) and Carrier Battle Group (CVBG) structure and Naval concepts of warfighting. The combined elements of the MAGTF, the CVBG and the ATF/ARG form a capability to project power and influence in support of our national objectives.

## **Joint Task Force (JTF) Operations Subcourse**

The JTF Operations Subcourse is both a core course and a foundation course within the CCSC curriculum. As a core course, JTF Operations introduces students to strategic and operational planning, joint organization, interagency operations, and command and control systems within a JTF. This aspect strives to develop each officer’s ability to serve as an action officer or liaison with a JTF. As a foundation course, JTF Operations requires previously learned knowledge such as operational concepts within the ground and air mediums discussed in the MAGTF Operations and the Naval Operations Subcourses. The JTF Operations Subcourse presents a JTF model for applying C4I planning and principles concepts. As a stepping-stone from the tactical to operational level of war, this subcourse attempts to reveal the operational level processes and decision making required of joint staffs and commanders of JTFs. Students will apply numerous Command and Control Philosophy (C2P) Subcourse concepts (particularly types of decisions and elements of command and control warfare) within the JTF Operations Subcourse.

## **Command, Control, Communications, Computers, and Intelligence (C4I) Planning Subcourse**

The objective of the C4I Planning Subcourse is to create a solid foundation upon which each officer may build a broad understanding of command, control, communications, and computer, and intelligence (C4I) Systems and C4I Systems planning. The focus of this subcourse is on advanced communication information systems (CIS) planning considerations for common user network and special subscriber terminal employment within a Marine Air Ground Task Force (MAGTF) as a component of a Joint Task Force (JTF). This course includes external Marine Corps connectivity to the theater commander-in-chief (CINC) and national level systems. A highlight of this subcourse is a two-week Network Nodal Manager’s Course, which offers detailed instruction and planning to support switched network operations. Officers who specialize in C2S participate in this highly technical course, which prepares them to operate at the highest level of the MAGTF and the Joint environment.

## **Information Management Subcourse**

The objective of the Information Management Subcourse is to provide a general understanding of the connectivity between C2 Systems, C2 nodes, and the inherent planning considerations and information flow required of each. This subcourse targets the non-Command and Control Systems Officers in the class. The focus of the subcourse is on communication/data principles and planning considerations for common user network and special subscriber terminal employment within a MAGTF, including external connectivity to a JTF, theater CINC, and national level systems. This subcourse draws on the concepts already presented in the Command and Control Philosophy, MAGTF Operations, Naval Operations, and JTF Operations Subcourses. Many officers who understand these skills become Information Management Officers (IMOs) for their respective organizations.

## **Professional Development Program**

The Professional Development Program is continuous throughout the entire CCSC academic year. The program is focused on those responsibilities officers will encounter as they progress in their careers. Emphasis is placed on professional growth. The Professional Development curriculum includes Troop Information, Unit Training Management, Safety, Career Development, and Professional Associations. Additionally, officers attend various Marine Corps University and Marine Corps Combat Development Command sponsored events scheduled throughout the course. As part of Career Development, guest speakers are invited to speak on a variety of topics and issues germane to each student's career progression. An active social schedule reinforces military protocol and complements the goals and objectives of the Professional Development Program.

## **Leadership Program**

The purpose of the CCSC Leadership Program is to enhance the students learning experience by taking an innovative and unusual approach to leadership. Its purpose is not to adopt any particular paradigm or style in examining effective leadership. Numerous leadership decision scenarios, ethical decision scenarios, family readiness scenarios, and other challenging scenarios are presented to help develop professional leadership skills. Officers are allowed to come to their own conclusions via guided discussions and guest lecturers.

## **Effective Writing Program**

The Effective Writing Program consists of two distinct phases. The first phase consists of programmed instruction in grammar and usage. The second phase consists of classroom instruction in writing skills – including a study of issues related to clarity of thought, visual impact, correctness, precision, readability, and systematic approaches to writing – supplemented by personnel conferences and writing laboratories. During phase two of this program, students are tasked with writing several different types of papers.

These papers include a book review, an argumentative essay, a leadership paper, a concept of command paper, and a command and control issue paper. Submission for publication is encouraged to develop professional authorship of issues affecting the Marine Corps and the Department of Defense.

## **Personal and Family Readiness Program**

The Personal and Family Readiness Program is continuous throughout the entire CCSC academic year. This program makes the students aware of the multiple agencies available to support individuals, units, and families. The Personal and Family Readiness curriculum includes the Semper Fit Program, Marine Corps Family Team Building, Personal Services, and Social Events. CCSC also conducts a Spouses Day early in the course to orient CCSC families with local agencies and services. Numerous social functions and family events are also included within the curriculum. A major highlight of the program is a Family Readiness Symposium comprised of the HQMC Family Readiness Officer, Commanding Officer, Key Volunteer, Key Volunteer Network Advisor, legal officer, and chaplain. The panel provides insight into all aspects of family readiness to assist future company commanders.

## **Battle Studies Program**

The Battle Studies Program consists of two distinct parts. The first part is a series of staff rides to local Civil War battlefields. The focus of these rides is to evaluate both the historical and command and control aspects of each battle. Students are tasked to look at each battle from the commander's point of view. Battlefields visited include Gettysburg, Fredericksburg, and Antietam. The other part of the program requires briefings on historical battles by student teams to the class and faculty. The teams are tasked with highlighting command and control aspects as well as the historical features of each battle. Additionally, students are evaluated on briefing techniques to help improve their overall speaking skills. The presentations cover the period beginning with the U.S. Civil War in 1862 to present day deployments.

## **C2 Applications Program**

Command and Control (C2) Applications is a program designed to provide maximum exposure to current C2 applications used within the various Services and joint operations. C2 applications studied are positioned throughout the entire CCSC curriculum. C2 applications relevant to Marine Air Ground Task Forces, Naval Operations, Joint Task Forces, and C4I Planning and Information Management Subcourses are scheduled accordingly. The C2 Applications Program culminates in production of an annual **C2 Compendium**, which is a ready reference of C2 applications utilized within the Department of Defense. The **C2 Compendium** is available on the CCSS web site.

## **Communication Information Systems Officer Course (CISOC)** **Curriculum**

The Data Systems Officer Course (13 weeks) and the Basic Communication Officer Course (18 weeks) merged during July 1996 and the combined course is now called the Communication Information Systems Officer Course (CISOC). It is taught at the Command and Control Systems School in Quantico, VA. Students remain aboard Quantico after The Basic School and report to their next command after attending school. The course is 23 weeks in length and prepares entry-level officers for MOS 0602, Command and Control Systems Officer.

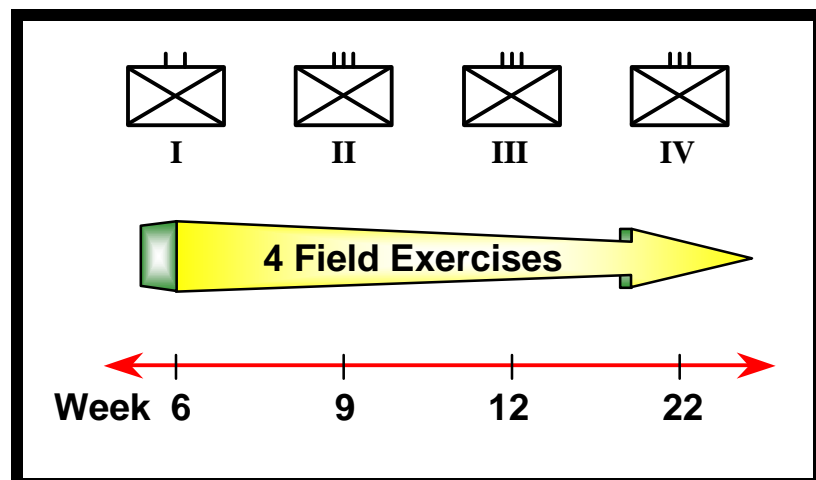
The primary goal of the course is to ensure that students gain mastery of the fundamental techniques and skills required for the planning and employment of Marine Corps command and control systems in both tactical and garrison environments. Students receive over 1150 hours of instruction including lectures, numerous equipment practical application exercises, computer labs, and four field exercises. The course has a personal computer lab with 60 workstations and a networking lab to support data systems training.

Students learn the basics of how a tactical data system works, how to interface it with tactical communications systems, and how to troubleshoot the systems. To validate the training conducted in the classroom and during practical applications, the course has four separate field exercises of up to five days each. During the exercises, students are assigned billets they will hold in an infantry battalion communications platoon and regimental/division sized communication elements. They develop, brief, and execute a Communication Plan (COMMPAN) for each of the four exercises.

### **Field Exercises**

The first exercise involves an Infantry battalion in both defensive and offensive operations. The students establish a Combat Operations Center (COC) with facsimile (FAX), Digital Communications Terminals (DCTs), and all tactical radio nets (using SINCGARS in the secure and frequency hopping mode) remoted from a radio hill.

The second exercise drives home the importance of planning, briefing ability and staff action. The exercise is a battalion in the offense Command Post Exercise (CPX) held at Fort A. P. Hill. The students gain an acute understanding of the importance of reliable communications during this CPX.



CISOC students must brief a communications plan, provide estimates during the exercise, and conduct numerous site surveys and movements. At the completion of the second exercise, the students know how to move and communicate.

Field exercises three and four take on the challenges of digital communications. In the third exercise the students establish three separate command posts linked by multichannel radio. Each CP has a digital telephone switch with both secure and non-secure phones. The students establish a Local Area Network (LAN), a dial-in capability and Wide Area Network (WAN) over the multichannel radio net. The communication systems used in exercises one and two are incorporated, and the students still have FAX, DCTs and a radio hill with nets remoted to the COC. Between FEX 3 and FEX 4 the staff guides the students through a large practical exercise that simulates FEX 4. The culminating exercise, FEX 4, is planned and executed by the students to reinforce all training and to provide the level of confidence required to be successful in the operating forces. Recently added to FEX 4 is the installation of a Secure Internet Protocol Router Network (SIPRNet) and Non-secure Internet Protocol Router Network (NIPRNet).

## **Major Subject Areas**

- (1) Introduction to Marine Corps Communications and Information Systems
- (2) Single Channel Radio
- (3) Communication Security Material System
- (4) Introduction to Data Communications Network
- (5) Introduction to Local Area Networks
- (6) Switched Backbone
- (7) Communications Plans and Orders
- (8) MAGTF Command Element Communication Information Systems
- (9) FMF Communication Organizations
- (10) Power
- (11) Introduction to Maintenance Management

## **Advanced Communication Information Systems (ACIS)**

### **Course Curriculum**

The objective of the Advanced Communication Information Systems (ACIS) Course is to provide a formal training program for field grade officers in MOS 0602, Command and Control Systems Officer. The mission is to provide current and necessary information to optimize the effectiveness of MAGTF G-6 officers. This is accomplished through presentations of C4I issues at the MAGTF level. The course also uses subject matter expert panels, off-site visits, and limited lecture/discussions. The purpose of the instruction and detailed application is to enable the mid and senior level officers to understand, plan, and manage a significant quantity of increasingly complex technical equipment and connectivity requirements, in order to more effectively support the commander's decision-making process.



The ACIS Course is a two-week course of instruction with class seats designated for both active duty and reserve, field grade Marine and other service officers, designated to serve or serving in MOS 0602 billets. The course provides a unique opportunity for active and reserve counterparts to meet and share insights and experiences. The ACIS Course is conducted at CCSS annually in June with a maximum capacity of 50 students. Highlights of the course include development and briefing of C2 issues papers, a three-day Network Nodal Manager's Course, and an "ACIS Toolkit" which is provided to each student in CD-ROM format.

## **Communication Information Systems Officer Refresher (CISOR) Course Curriculum**

CCSS recognized the widening training gap created by the merger of the Communication Officer (2502) and the Data Systems Officer (4002) Military Occupational Specialties (MOS's) into the Communication Information Systems Officer, MOS 0602 (recently changed to Command and Control Systems Officer). In an effort to bridge this gap, the school designed a unique course of instruction called the Communication Information Systems Officer Refresher (CISOR) Course. This course targets active and reserve MOS 0602 officers at the company grade level who have served a tour out of their MOS and reserve officers serving in MOS 0602 related billets. The course provides both a technical overview and a refresher of major USMC communications and information systems. The course will assist in preparing captains for duty in both operational and associated staff billets throughout the operating forces and reserves.

The CISOR Course is a two-week, "total force" course of instruction, with half of the class seats designated for reserve Marine officers serving in MOS 0602 billets. The target population includes active duty MOS 0602 officers moving to the Operating Forces from billets outside the Operating Forces, and reserve officers. The course provides a unique opportunity for active and reserve counterparts to meet and train together, ensuring unity of purpose and direction, and providing unique insight for each into the capabilities resident within the Marine Corps active/reserve components.

The CISOR Course is conducted at CCSS annually in June, with a maximum capacity of 50 Command and Control Systems Officers. Reserve students are selected by the Staff Training Course selection board at HQMC (RAM-4). Active duty students may attend on funded temporary additional duty (TAD) orders or be sent "TAD enroute" to their new duty station via permanent change of station orders.

## **STUDENT EVALUATION**

Command and Control Systems School has two evaluation programs. One program supports the Communication Information Systems Officer Course (CISOC) and the second program supports the Command and Control Systems Course (CCSC). The evaluation system establishes and emphasizes high academic standards appropriate to both entry-level and career-level education. Grading by course coordinators is based on a

variety of oral, written, and practical application evaluations with an emphasis on quality seminar contribution. Grades of A, B, C, D or Incomplete may be assigned as well as a numerical grade that represents letter grades. A cumulative average of 80-percent is required to graduate from entry-level training (CISOC) and a minimum grade of B is required to pass and graduate from the career level course (CCSC). Remediation is required for all students who fail to meet a passing score for individual courses.

## **AWARDS**

The Command and Control Systems School Awards Program is designed to recognize superior achievement and encourage excellence by each student. Honor Graduates are recognized during the graduation ceremony and their official records are appropriately documented. School awards for each course are described below:

**Command and Control Systems Course (CCSC) Awards.** CCSC presents the following awards:

- (1) Honor Graduate Award. The CCSC graduate with the highest overall grade for the course is the Honor Graduate and receives a framed certificate from the Marine Corps Association.
- (2) Commanding General, MCCDC, Honors Roll. The Honors Roll recognizes those officers who graduate in the top ten percent of their class. Academic achievement is considered in conjunction with demonstrated leadership and contributions made to the professional development of fellow students. Students are recognized with a letter from the Commanding General, MCCDC, which is included in their permanent records.
- (3) Colonel Donald G. Cook Award. This award recognizes the student who achieves the highest overall academic average and is named in honor of a Communication Officers School graduate who received the Congressional Medal of Honor for service during the Vietnam War. This award is provided by the Armed Forces Communications and Electronics Association and consists of an engraved desk clock. The student's name is also added to a permanent plaque displayed at CCSS.
- (4) Major General Merritt A. Edson Award. First implemented in 1988, the award recognizes the student who demonstrates superior leadership qualities throughout the entire course. Selection is made by the staff based on leadership during assigned billets, personal appearance, military presence, contributions to professional development of fellow officers, and performance best embodying the profession of arms. This award, which is provided by the Marine Corps Association, consists of a plaque and gift certificate for use in purchasing professional books at the Marine Corps Association Bookstore.
- (5) Command and Control (C2) Issues Paper Awards. These awards recognize students who demonstrate superior research and writing skills applied to the topic of Command, Control, Communications, Computers, and Intelligence. Selection is made by the faculty

and is based on the relevance, technical merit, and content of the papers. Awards for the top five papers are provided by the Marine Corps Association and consist of certificates of accomplishment and cash awards.

(6) Major General Robert E. Hogaboom Leadership Essay Awards. These awards recognize students who demonstrate superior-writing skills applied to the topic of Leadership. The top five papers, selected by the faculty, are submitted to the Marine Corps Association in competition with the top five papers authored by students from the Amphibious Warfare School. Marine Corps Association selects the best two for publication in the *Marine Corps Gazette* and provides certificates of accomplishment for all participants.

(7) Battlestudy and C2 Applications Awards. First implemented in 1999, these two awards recognize superior student effort in researching and presenting briefings to the class on an historic battle and a command and control system. The faculty makes the selection. The winning student research teams are presented cash awards provided by the Marine Corps University Foundation.

### **Communication Information Systems Officers Course (CISOC)**

**Awards**. CISOC presents the following awards:

(1) Honor Graduate Award. The CISOC graduate with the highest final overall score for the course is the Honor Graduate and receives a plaque from the Marine Corps Association.

(2) Commanding General, MCCDC, Honors Roll. The Honors Roll recognizes those officers who graduate in the top ten percent of their class. Academic achievement is considered in conjunction with demonstrated leadership and contributions made to the professional development of fellow students. Students are recognized with a letter from the commanding General, MCCDC, which is included in their permanent records.

(3) Academic Honor Award. The CISOC graduate with the highest academic average for the course receives the CISOC Academic Honor Award and receives an engraved plaque provided by the Armed Forces Communication and Electronics Association. The student's name is also added to a permanent plaque displayed at CCSS.

### **WEB SITE**

The CCSS Web Site is located at <http://www.mcu.usmc.mil/ccss>. Current information about the school, staff, and classes in session may be found at the site. Points of contact are provided for further information.